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frozen, must have existed there. 4thly. I beg to call attention to the striking phenomena brought to light by the observation of the celebrated Russian explorer Middendorf, as a decided proof that the cold is greatly moderated in advancing from Siberia towards the North Pole. In passing northwards over the vast masses of land which constitute the great region of Northern Siberia, and which are treeless and entirely sterile, he found, on reaching the Arctic Ocean, that the long promontory of Taimyr, which juts out for some distance towards the North Pole, flanked on either side by frozen sea, exhibited quite another aspect, and that fir-trees were even growing upon it, though nothing of the sort was in existence for enormous distances to the south. Now, as, for the reasons just given, there can be no great and lofty masses of land near the North Pole, so we see actually that where the water does largely prevail, the cold is actually much modified in the Polar Sea. We have only, therefore, to adopt the best plan for reaching the Polynia of this induction. In his Memoir, Mr. Markham has (true to his friend Sherard Osborn) set before you the very great advantages to be gained by adhering to the plan of that gallant officer; and that, by sledging along the west coast of Greenland, the true physical geography of that enormous snow-clad region will be determined, and that many important additions will be made to geology and natural history science, which cannot be expected to be met with on the more purely maritime expedition to the north of Spitzbergen. In these respects I entirely agree with our accomplished Secretary. I will not deign to contrast the feeble and irrelevant argument put forth by timid persons as to the danger to be incurred by Polar navigators, for surely the British Navy has not come to the condition that, with their present great means and appliances, they cannot emulate and surpass the efforts of Hudson and our earliest voyagers in their little cock-boats. If there were great danger to be encountered in this projected expedition, it would indeed be only an additional stimulus to our brave seamen; but, as a matter of fact, there have been many fewer losses of life in the Arctic or Antarctic Sea than in other quarters of the globe over which sailors are bound to roam. *Gentlemen, we are not here called upon to express our opinion as a body in favour of one or the other plan of reaching the North Pole. It will be for the Council of our own body, aided by the advice of the Councils of other Scientific Societies, so to put the case before the Admiralty and Her Majesty's Government, as to secure the fulfilment of a great geographical object by those means and by that route which our rulers may deem to be the most efficacious.*

The President then read the following extracts from a letter he had just received from Lady Franklin, dated Madrid, April 6th:—

“MY DEAR SIR RODERICK,—

“Although I have little doubt you know from some of our mutual friends that they have written to me on the subject of the Polar Expedition, yet I cannot leave it to them alone to tell you how very deeply I sympathise with the proposed effort, and how earnestly I wish it may be realised. For the credit and honour of England, the exploration of the North Pole should not be left to any other country. It is the birthright and just inheritance of those who have gone through fifteen years of toil and risk in Arctic seas. The glory that yet remains to be gathered should be theirs; and can there be any moment so fitting as the present? Those accomplished Arctic navigators who have done so much already, are still young in years and ardour, though old and wise as patriarchs, by dint of observation and experience. What future generation will see the like? Twenty years hence, or even ten, will you be sure to find a M'Clintock able and longing for the service, and some half score of officers resembling him, scarcely less anxious to join, besides a host of hardy seamen trained in Arctic seas, and to whom no other service can compete with it in attraction?

"I am sending you these lines because I do not wish you to think it possible that my interest can flag in anything connected with Arctic enterprise; and though, at first, sad memories of the past made me feel some sickness of heart at the revival of the question, I have struggled against that weakness, and overcome it; the more so as the last words I had in a farewell letter from our dear friend Osborn, written on the eve of his departure for India, were to engage my earnest sympathy in this new enterprise. It would, indeed, be unreasonable, and much to be deplored, if the fate of my dear husband and his companions were to be made an official objection to all future Arctic exploration. They met with the unhappy end which too often befalls the pioneers of tentative and dangerous enterprise, but they rest alone in their awful calamity. Every succeeding expedition sailed with better ships, better equipments, better charts, better supports, and with ever-increasing knowledge; and thus it has happened that no naval service on the face of the globe exhibits, on the average, so few casualties as that in the Polar seas. You have justly said, that 'in the proposed expedition no such calamity can be dreaded, for it has no analogy to the case of Franklin.' I can hardly be wrong in believing that, whoever commands the expedition (and I have little doubt who that man will be), should have his own way in the matter. Who so well able to judge as he who has to perform, and with whom success is the one thing that will be the test of his judgment.

"JANE FRANKLIN."

Captain INGLESFIELD said that it appeared to him that the question now under discussion was, which is the *safest* and *shortest* route to the North Pole? When he last had the opportunity of speaking with reference to Captain Sherard Osborn's paper, he said that he considered it was quite practicable to reach the North Pole by Smith Sound. Having sailed into Smith Sound himself, and seen open water before him, he should be false to his colours if he did not declare that he believed that sea to be navigable. It so happened, however, that a gale drove him out of it. He felt bound to say that if the offer of the command of an expedition were made to him, and he were told to find his way by the safest and shortest route to the North Pole, he would prefer to go by Spitzbergen; and for these reasons. First of all, to reach the Pole by Baffin's Bay and Smith Sound, the distance from London is 4000 miles. From London to the North Pole, by the Spitzbergen route, the distance is 2500 miles upon one side of Spitzbergen, and 2400 miles upon the other. Therefore he need say no more as to which is the shorter route. Now arises the question as to which is the safer route. Those who have passed through Melville Bay, as he had done on three different expeditions, well know what it is to go through the pack. They have to struggle day after day, and perhaps find it is impossible to get beyond a certain point. Mr. Markham alluded to the number of expeditions that have passed through Melville Bay; but during one of the expeditions which he (Captain Inglesfield) commanded, the ice-master (who had made forty-two voyages to Greenland) declared that he had never seen such an abundance of ice as there was upon that occasion. We must admit that there exists a difficulty there. If the expedition which is sent to reach the North Pole by Smith Sound should go in another such year, and should encounter similar disadvantages in getting through Melville Bay, he asked, where is the safety and certainty of that route? He would put the question in another form. Let us suppose the ships have got through Melville Bay, and have reached Smith Sound. All those who have visited that place declare that they saw an open sea before them. What is the argument advanced by Mr. Markham in his paper upon that very subject? He says, "If a great navigable ocean is arrived at in those months, then, of course, his progress will be arrested." That means to say, the expedition will come to an end; the ship having been placed in winter quarters in Smith Sound, can proceed no

further, because a great ocean is discovered. Dr. Kane placed his ship near Smith Sound. He was not able to proceed on a sledging expedition, but he sent his steward, Morton, to reach the highest latitude attainable in that neighbourhood; and Morton's description was, that he beheld a large open sea. We have heard from various Arctic officers of the difficulty of carrying boats over ice; if the sledging expedition spoken of by Captain Sherard Osborn, of seven sledges and seventy men, should arrive at that point where there is the Polar Sea, how are they to reach the Pole? Moreover, we have from Von Wrangel, who went from Siberia with the object of reaching the Pole, evidence of a great open sea, which obliged him to return. From Sir Edward Belcher, we hear that when he arrived at the northernmost point of Wellington Channel, an open sea was discovered by him.

Mr. MARKHAM: In May?

Captain INGLESFIELD: In May. To sledge over that open sea, even if it is all frozen, is fraught with difficulty and danger. Dr. Petermann suggests that in March a ship should be sent to Hammerfest, and, having coaled there, that she should then sail to the northward. Whom have we to support us by their evidence in this theory? Why, the greatest of Arctic navigators, Sir Edward Parry, who, when he was sent by the Government to reach the North Pole, proceeded by sledges, and, having travelled a number of days on the ice, reached that open ocean, but was then obliged to abandon the expedition. If he could have attained one degree more, he would have obtained for himself and his followers the Government reward of 5000*l*. He was obliged to abandon the expedition, because the ice was driving to the southwards. He said he might have sailed to the latitude of 82 degrees without touching ice, and would have been then only 465 miles from the Pole. He therefore argued that he could have reached the Pole if he had only been in a ship that could have sailed through ice. In those days they had no steam; it was merely a matter of sailing and tracking the ship. But in these days we have powerful steamers that can go into the Arctic regions. He (Captain Inglesfield) had been twice in a ship that had broken through ice 12 and 14 feet in thickness. The fear of pack-ice, by which a ship might be detained in passing from Spitzbergen to the North Pole, is a bugbear. That ice can be penetrated, as Ross penetrated the ice of the Antarctic Seas, with sailing-ships, which in the same manner was declared by others to be impenetrable ice, yet he sailed many hundreds of miles through it. There is one other instance which may be quoted. The surgeon of the *True Love*, in 1737, reached the latitude of 82° 30'. He declared that there was an open sea before him, and that if they had proceeded, the vessel could have reached the Pole. It is quite practicable to attain the Pole by this shorter and safer route. With regard to the question of cost: Parry's expedition, sent out in days when things were much more expensive than they are now, cost the Government 9977*l*. The expedition sent out the other day by Lady Franklin—a screw-steamer, supplied with everything that intelligence and money could provide for two years and a half—cost only 10,412*l*. In the present case the expedition could be performed in six weeks; the Pole could be reached, and the objects of the enterprise gained in that time. While, if we pass through Smith Sound, there can be no doubt that the expedition must remain there for a winter, if not for two; and it might happen that the exploring party would have to retreat in their boats, as Kane did, and abandon the ship. He was quite sure that those who have attended to everything that has been said and written upon this subject, will agree in believing that the safest and shortest route is by Spitzbergen. A very distinguished officer—now, alas! no more—who was for many years the Hydrographer of the Admiralty, and who had the opportunity, more than any one else, of learning what were the opinions of all naval officers upon such a subject—a man who advocated, not only by his voice, but by his purse,

the search for Sir John Franklin—was in favour of a voyage by Spitzbergen to reach the Pole. He had only to mention the name of Sir Francis Beaufort, to enlist the sympathy of those who were present; and he believed that that man's opinion ought to have great weight with this Society.

Staff-Commander J. E. DAVIS, R.N., said that had not Dr. Petermann, in drawing the attention of the Royal Geographical Society to the subject of reaching the North Pole by the Spitzbergen route, drawn inferences and founded his arguments by a comparison with the Southern Polar Regions (where he, Staff-Commander Davis, had served under Sir James Ross), he should not have ventured to address the meeting, not being an Arctic man; but as no Arctic man could fail to take a great interest in geographical discovery in the Antarctic Regions, so it might readily be believed that he took a deep interest in Arctic discovery, and having mixed much with men who had rendered themselves famous in Arctic travel, he had naturally imbibed some of their enthusiasm, and wished most earnestly to see an expedition start for the North next year. The President had drawn the attention of the Society to the necessity of an expedition to the Southern regions, to observe the transit of Venus in 1882, and he thought it absolutely necessary that men should be educated to meet that requirement, for the North is the School to prepare a man for the University of the South. In some respects Dr. Petermann was not happy in his comparison,—in some his arguments were sound; the South Pole (possibly continental) is thoroughly open to the great oceans; the North, on the contrary, on one side a mass of islands, the straits between which are affected by strong currents, but on all sides surrounded by land, and thus cut off from the influence of the great ocean: conditions as widely separated as the Poles themselves. On the other hand, no doubt exists but that large quantities of ice are formed in both in the winter near the Poles, which in spring breaks up and drifts towards the Equator, forming heavy ice-streams in a lower latitude, through which it is difficult to penetrate, but which if penetrated leads to comparatively clear water towards the Poles. The word *barrier*, used as it has been, should be understood, in a *comparative* sense, as that which would stop a vessel,—as would be said of a wall, it would be a barrier to a musket-ball, but to a shot from an Armstrong gun it would not be so. Now his opinion was, that the impenetrable icy barrier which stopped Wilkes, Cook, Bellingshausen, and others, was simply nothing more than heavy pack-ice, into which, with unfortified vessels, it would not be prudent to venture, for the *Vincennes* and the other ships so stopped, were no more fit to enter an Antarctic pack than Dr. Kane's vessel, the *Advance*, was "fit to look at an iceberg;" and even had the *Vincennes* been fortified, Lieutenant Wilkes, without the previous education, would have hesitated to take the pack: had he possessed both, in all probability he would have had the honour of discovering that large tract of country now bearing the name of our Queen. It was with the knowledge that these extensive packs forming near the shore in the winter, and drifting from it in the spring, through which it would be absolutely necessary to force a way to gain comparatively clear water,—the confidence he felt in himself, gained by experience in a thousand fights with the ice, and with a good ship under him, that caused Captain Ross not to hesitate a moment in entering the pack, on the principle of "nothing venture, nothing have," and without which knowledge even he would have been turned back at every point; so that it is seen that the ice usually called a barrier, met with in about 62°, is simply pack-ice, heavy and extensive it is true, but which, entered and passed through, leads—not to the Pole, but southward to the real barrier. This barrier commences to the eastward, at the western point of Victoria Land, and runs nearly west for upwards of 400 miles, or one-twelfth the circumference of the Pole itself, in latitude 78½°, and is from 150 to 180 feet high. Westward of the starting point, Cape Bird, no land

whatever was seen, and such was the clearness of the atmosphere, that, had there been a continuation of the land, and that land of the same character as that previously discovered, they could well have seen it sixty to eighty miles off. The whole of this barrier was of the same uniform character, excepting at the western extremity, where it was more broken in the face; this is where the highest Southern latitude was attained. If a comparison were to be drawn between the North and the South, it must be expected that some such barrier would be found in the North, though in a higher latitude, and then the argument of an existing Polar Sea, or open sea round the Pole, must fall to the ground. His opinion was that of Dr. Petermann, viz., that the ice which stopped Parry and others northward of Spitzbergen, was pack-ice, which must be boldly entered and passed through, and then open water, similar to that in the south, would be found. In the case before us, two routes have been proposed for attaining the same object, viz., to reach the North Pole of the earth, and to extend geographical research around it; and in pointing out the weak points of one route, it was more to establish the feasibility of the other than for any other purpose. The question was, had Captain Sherard Osborn made his case good? He (Captain Davis) thought not. Captain Osborn commenced with the axiom that his starting point for the Pole is from Cape Parry, and he at once takes one of his ships to that point, for he said, "I accept this as the distance (viz., 484 miles) we have to deal with." Should he be balked in that, as in all probability he would, and not able to get further north than the *Advance* did (for Kane describes the ice to the northward of his position as solid), he has another 200 miles to add to his distance from the Pole, or double that distance to travel in going and returning. Thus it would be 1360 miles instead of 968, as stated by him; and even granted that it be from Cape Parry, no Arctic traveller yet has traversed even that distance and back in a straight line, for it would be just as easy to walk from London to Canterbury and back in a straight line as what he proposed; or if he could do it, it is contrary to all experience, and a glance at the map will prove that. In Arctic travelling it is generally necessary to keep by the shore edge, so that all the sinuosities of the bays and capes have to be followed; and were the actual distance to travel doubled, it would be nearer the mark than the direct distance. But if it is allowed that a ship could be taken direct to Cape Parry, it must also be granted that by the Spitzbergen route a ship could be taken to the Pole itself, or near it. Again, with regard to that part of the Polar regions marked as "Kane's open sea," without casting the slightest reflection on that gallant explorer's cause or efforts, he might be allowed to doubt the existence of that open sea. It must be remembered that Dr. Kane did not see the open sea himself; its existence depends only on the report of the seaman Morton. That Morton *did* see water, he (Captain Davis) could readily believe; but to the extent he reported he did not quite credit. All know how readily things can be seen when looked for through the spectacles of one's own desires. Wilkes saw land in the South which he was most anxious to discover; although he (Captain Davis) had been credibly informed, had he been guided by the eyes of others instead of trusting entirely to his own, he would at least have placed a query against it, and thus have prevented the doubt that still hangs over his otherwise valuable discoveries. Morton's desire was to discover water, and he discovered it; he was told to look for it, and he found it. As the parched and thirsty traveller in the desert sees in the mirage the lakes and rivers he so ardently desires, so the Polar traveller has often to doubt the evidence of his own senses in his discoveries of land or water; and as Morton's latitude of Cape Constitution had to be reduced nearly half a degree, so it may be permitted to do the same with his extent of vision. With these doubts as to open water, with the total uncertainty as to the nature of the

coasts beyond Smith Strait, and which, were it to be reasoned on from analogy, would be similar to the land to the southward, cut up into straits and islands, he did not deem Captain Sherard Osborn's plan the best for the attainment of the object in view (although much may be done on that route in geographical discovery), and consequently must record his vote (if of any value) for the Spitzbergen route. There was there a wide field for discovery, and if the North were at all similar to the South, at one point or other the barrier of pack-ice could be penetrated; and then, if a direct path did not lead to the Pole, it would at least lead to a barrier similar to that of the South, which would be quite satisfactory that the Pole could not be reached; for if at all like the one in the South, he should like to see the man that would get beyond it. Spitzbergen would be the starting point, to which place a few double wooden houses, provisions, and boats could be sent by a transport, to avoid too heavily loading the ships of the expedition on their voyage out; and then in their final start for the North, they would leave as fully supplied with every necessary from near 80° as if they that day left Portsmouth harbour. The map, at a glance, will show the wide range for geographical discovery; they would have, as it were, the Arctic world before them. A party left at Spitzbergen could be collecting scientific data, and keeping a meteorological register in co-operation with the expedition, from which valuable results would be obtained, for no branch of science would profit more by this voyage, after geography, than meteorology and its attendant handmaiden, "the physical geography of the ocean." What would not be given now for a series of thermometric observations of the sea surface in those regions, from which could be constructed a thermal chart, and by the isothermal lines reason by analogy of the thermal state of the Pole itself? to say nothing of the value of a series of deep-sea observations in connection with them. These observations could not be obtained of any value in the Straits of Smith Sound, where local influences must affect them; and such observations in the extensive area northward of Spitzbergen would soon set at rest the fact of the existence or otherwise of an open Polar sea; for although he had listened attentively to the arguments in favour of that theory, (and Captain Maury would almost convince a man against his will,) he candidly confessed they had failed to convince him, and he did not believe in the existence of one,—that is, of an open Polar sea of a higher temperature than the seas to the southward. Not the least valuable effect of an expedition *viâ* Spitzbergen would be to set that question at rest. That such an expedition would not be wanting in volunteers, both in officers and men, he was certain. Were a person on board any ship in the navy to pass the word fore and aft for volunteers for the Arctic regions to go on the quarter-deck, such a rush and tumble up the hatchways would be made, that it would almost be supposed the hands had been turned up to reef topsails; and were all the volunteers from the navy to be accepted, the Reserve would have to be called out to defend our shores—so that there would be no lack of men or officers; and if the Chancellor of the Exchequer would only spare the trimmings of an iron-clad, or the parings of a fortification, another voyage to the North Pole might be considered a "fait accompli."

Staff-Commander Davis exhibited three drawings descriptive of the different formations of ice and icy barriers.

Admiral FITZROY begged permission to say a few words in connection with this subject, but more directly in favour of a foreigner of eminence and distinction, who was about to leave this country, and who was at that moment lying on a bed of sickness. He alluded to Captain Maury, the American hydrographer. It was very remarkable that in this country no public acknowledgment had been made of that eminent man's works. For fifteen or twenty years the results had been known to every practical navigator; all countries had benefited by them, our own more particularly. As one who had followed in his

steps, he ventured to take the only opportunity that might occur before Captain Maury left this country, to draw attention pointedly to what he had done for navigators, with a view to some acknowledgment being made of the great services he had rendered.

The PRESIDENT was sure they would all agree with Admiral Fitzroy in the well-merited eulogy which he had passed upon Captain Maury. But Captain Maury had not been unnoticed in this country. He had been invariably received with acclamation; he had been elected an honorary Fellow of the Royal Geographical Society; and they all esteemed what he had done. It was not the province of that Society to confer honours. Foreign countries were in the habit of conferring honours for services done or for works presented to them. As Captain Maury was not a British subject, he did not know what the British Government could have done. Perhaps the Board of Trade, of which Admiral Fitzroy was so distinguished an ornament, might have been moved to do something in favour of Captain Maury; and for one he should have been very happy if it had been so. They must revert to the question of the North Pole Expedition.

Captain ALLEN YOUNG said he was in favour of both routes, and it was difficult to make a choice between them. He agreed with Mr. Markham that the dangers of passing through Melville Bay had been greatly exaggerated. As the voyage of the *Fox* had been quoted, he would mention that on that occasion there was no fast or land ice in Melville Bay to hold on by. It was a case of having to push into the pack, or the chance of being driven back to Greenland. He need scarcely say that M'Clintock took the pack in preference to the latter alternative. If an expedition were to start from this country, determining to pass a winter or two out, he should decidedly advocate the Smith Sound route; but if it was to be an affair of the summer, or a period of six months, then he should say go by Spitzbergen and the sea route. He thought they could reach the Pole by both routes. M'Clintock, the greatest Arctic authority, always told him that if he wished to reach the Pole he would travel over the ice in sledges, either by Spitzbergen or Smith Sound in winter. No one knew the risks of the pack-navigation better than Sir Leopold M'Clintock, and he always expressed his opinion that the only way to reach the Pole was by sledge in the winter. For himself, as a sailor, he should prefer to stick to his ship and go by Spitzbergen and the sea. He conceived that when the ice travelled southward, and the surface of the sea ceased to freeze in the months of July and August, that there must be a space of open water formed in the rear of the ice which had come south; and that if a screw-steamer could be taken up to the southern edge of the ice between Nova Zembla and Spitzbergen, between the meridian of 40° and 50° east, in the middle of July she would, by cruising along the edge, find an opportunity of forcing her way into the pack. Should she succeed in getting five or six miles inside the pack, she would be in comparatively smooth water, and could then push on to the north, working through the ice as it moved south, until, having passed through two or three hundred miles of this pack, she would then, he thought, arrive at the open water in rear of the pack, and would sail away to the Pole, returning by the same route or by another meridian, as it might be found advisable.

Mr. LAMONT stated that he had passed two summers in Spitzbergen, in his own yacht, principally for sporting purposes, and had ample opportunities of observing the country in all its aspects. He felt bound to say, from what he saw himself, and from what he heard from others who had better opportunities of judging than he had, that he totally disbelieved in the existence of an open sea around the Pole. In the course of the two summers that he passed in the Spitzbergen Sea, he had an opportunity of conversing with at least twenty men, Norwegian walrus-hunters, shrewd, hardy, practical fellows, who had passed, some of them, as many as twenty summers on the edge of the Polar ice. Every one

of these men, without exception, scouted the very idea of the existence of an open Polar sea. Dr. Scoresby devoted several chapters of his important work to disprove the existence of an open Polar sea. He admits that he never on any occasion penetrated further north than latitude $81^{\circ} 30'$, and he believed that to be the closest authenticated approximation to the Pole that was ever made by water. In that opinion he (Mr. Lamont) coincided. However, if this view was wrong, and an open Polar sea really exists, it would be a very easy matter to try it. One small screw-steamer, at a very small expense, would in three months put the thing beyond doubt, or, at least, settle the practicability of getting into it. A steamboat has never been in the seas round Spitzbergen, and it would be easy enough to try it. In the months of June and July, along the west coast of Spitzbergen, it is almost always open; nearly every summer it is accessible, owing to the Gulf Stream beating upon that part of the coast. There would be no possibility of penetrating to the east of Spitzbergen, where the ice is always heavier; but to the west, if the steamer should be jammed in the pack, it would be driven out again without much danger by the Arctic current in August, as this current then begins to prevail over the Gulf Stream. Parry's expedition failed because it started too late in the summer; but if a properly appointed expedition were to go to Spitzbergen early in the summer, and devote the remainder of that summer to hunting and laying in provisions for the winter, and then started with dog-sledges to the northward of Spitzbergen, they could no doubt reach the Pole with very little difficulty or danger. Such is the opinion of practical men whom he had conversed with in those parts.

The PRESIDENT: Starting in what month?

MR. LAMONT: Starting in March or April. The great difficulty in the way was the want of dogs. Spitzbergen is totally uninhabited, and there are no dogs there; they would have to be obtained, at some loss of time and expense, beforehand, from Siberia or Kamtschatka, together with the men who understood the management of them. Another reason why the Spitzbergen route is to be preferred is, that it appears, from reading Kane's and other accounts of the expedition to Smith Sound, that every one who has gone there has been nearly starved to death. Whereas in Spitzbergen, animal life abounds to such an extent that there is no risk of starvation. Good hunters would have no difficulty in laying in a hundred tons of meat in the summer months, to keep the dogs and men during the winter. During his last expedition his companion and himself killed 200 large animals in two months—walruses, enormous seals, Polar bears, reindeer, besides many geese and ducks; and they might have filled the ship had they been murderously inclined. Some of the speakers had remarked that intervening land is necessary for a sledge expedition. On the chart no notice is taken of a land which is well known to exist to the north-east of Spitzbergen. He had in his possession a Dutch chart, published about three hundred years ago, which lays down that land. He himself saw a party of Norwegian walrus-hunters who had visited it a fortnight previously. It is called Gillies Land, and lies, as far as he could make out from these uneducated men, about 60 miles to the north-east of Spitzbergen. Nobody knows whether it is a small island or the extremity of an extensive piece of land. His own impression was that there is a considerable extent of land there. His principal reason for thinking so was that, on a little island, called Ryk Yse Island, south-east of Spitzbergen, he had found numerous round boulders of red granite, and he could not conceive how the currents of the present day could carry such boulders thither from Spitzbergen. They must come from some unknown land to the north-east.

The PRESIDENT.—May I ask you if, in all the pack-ice you have ever seen or heard of in any of your expeditions to the north of Spitzbergen, you ever heard of any ice that was anything else but frozen sea-water?

Mr. LAMONT.—As far to the north-east as we penetrated, I saw several—not many—but several icebergs.

The PRESIDENT.—Carrying any terrestrial remains?

Mr. LAMONT.—Those particular ones did not; but I distinctly recollect seeing two or three icebergs. I have been on the coast of Labrador, and know what real icebergs are; but these were the only heavy icebergs that I saw in the Spitzbergen sea.

The PRESIDENT.—Was there anything on them?

Mr. LAMONT.—Nothing on those ones.

Mr. HICKSON said the object of his paper was to show what strong grounds existed for the conclusion that the Pole was accessible, and not exactly to place the Spitzbergen route in opposition to the route proposed by Captain Sherard Osborn. He wished to carry out the recommendation of Admiral von Wrangel, who in 1844 wrote to General Sabine in favour of an expedition by the Spitzbergen route; and at a later period was also in favour of an expedition by way of Smith Sound. In both cases the Admiral was perfectly consistent;—recommending a direct northern route in preference to the routes by the north-east and the north-west, which had been attempted during the last two hundred years, and which had failed in consequence of there being no outlet along the northern coasts of America and Asia for the ice formed in those high latitudes to escape. He should like to see expeditions in both directions, and trusted the time would come when the maritime nations of Europe would have nothing better to do with fleets prepared for war than to employ them for scientific objects. If, for the moment, either expedition must be given up, Spitzbergen offers the tempting advantages of a starting-point for exploration that may be reached every summer, by steam, in a fortnight, and of seas sufficiently wide to give a free passage to ice-floes drifting south.

The Secretary, Mr. MARKHAM, then read the following reply, from the Council of the Linnean Society, to the invitation of the Royal Geographical Society to co-operate in a memorial to Government on the subject of a North Polar Expedition:—

SIR,

In reply to your letter of the 2nd of March, I am directed by the Council of the Linnean Society, to communicate to you the following Minute, agreed to at their Meeting held this day:—

“The Council of the Linnean Society hear with the greatest satisfaction of the proposal for an expedition to explore the North Polar region. Concurring with the Council of the Royal Geographical Society in the opinion that important scientific results would be thereby obtained, that maritime adventure and voyages of discovery in the pursuit of science have an excellent effect upon the naval service, and that this expedition, in particular, would be in every respect worthy of the enterprise and prestige of the British navy, they have no hesitation in complying with the request to state their views on the various topics suggested by the Council of the Royal Geographical Society, in so far as they are connected with the pursuits of the Linnean Society, and for the purpose of being embodied in a joint representation of the principal scientific bodies, to be submitted for the consideration of Government.

“1. As to the popular objection to North Polar expeditions on account of the supposed danger, the Council cannot attach any weight to it, being convinced that it rests on a fallacy. The Linnean Society has, during the last half century, enrolled among its Members almost all the scientific officers of